Regional Activity to Promote Integration Through Dialogue and Policy Implementation (RAPID)

RAPID Task Order 1.5 Activity:

"SUB-SECTOR STRATEGY: TRANSPORTATION"

Prepared By:
Lynn M. Harmon Transportation and Economic Research Associates Inc
and Harold Kurzman, Chemonics International

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

Transportation is a critical factor in any market integration program. International trade costs are transportation plus the other costs of doing business across borders. As trade barriers are brought down, transport costs become a larger proportion of the total cost. Many of the countries in the region are landlocked requiring transportation corridors that transit other countries. For these countries, the added cost of transportation can in part be reduced through improvement in the infrastructure and handling of freight. Another major reality of international trade is speed and reliability of delivery. As more and more manufacturing companies source their raw materials worldwide and sell their products worldwide, time of delivery becomes almost as important as cost. Just in time inventory management accentuates that fact.

As the SADC members review their transportation networks, they need to review all the factors that affect transport cost, speed, reliability and security. These factors are the opportunities for USAID to make interventions that will hasten market integration, improve the competitiveness of goods from the SADC region in the international market and reduce the cost of imported goods for the African consumer. This Strategy Paper presents the dynamics and best practices for the SADC region, traces RCSA's involvement in market integration measures and suggests future strategies for RCSA's consideration.

For the 1997-2003 cycle, AID set the following goals for infrastructure under the Strategic Objective of supporting a more integrated regional market:

Intermediate Result 2: More efficient provision of infrastructure
- IR 2.1: Physical infrastructure built and maintained
- IR 2.2: Private participation in providing infrastructure services increased
- IR 2.3: Regional policies regulatory frameworks and operational/technical standards harmonized

During the current cycle, some road infrastructure has been built, some rehabilitated and the concept of user charges administered by an independent fund has been introduced in several of the SADC countries. Regular maintenance programs are becoming an integrated, funded part of transportation planning and need further support to insure their effective operation, sustainability and a level playing field for the optimal traffic split between road and rail. Railway concessioning is beginning to accelerate and at least in the case of the Bulawayo-Beitbridge Railway has brought the improvements in infrastructure and management envisioned for concessioning support. Some ports are also being restructured and terminals concessioned, but cargo handling at most regional ports is still very slow by international standards. The port sector should be addressed in the next cycle. Considerable advances have been made in incorporating the private sector transportation operators into decision-making on transport policy, regulations and bilateral agreements. The value of their inclusion has been established now in many of the SADC countries. The process will be strengthened now by encouraging governments to formalize this role and assisting associations to bring hard economic data to the debate. Regional regulatory frameworks have been established for some areas, but there is still considerable work to be done before harmonized standards have been established and are enforced throughout the region.

For 2003-2008, it is recommended that support for the three infrastructure Intermediate Results be continued and expanded to include operation of infrastructure in the first, formalization of an advisory role for the private sector in the second, and enforcement in the third. The matrix in Section V, summarizes the revised IRs, activities to achieve them, and indicators to evaluate success in achieving the IRs. The strategies presented in this study address three core issues for USAID participation and the activities required to achieve more efficient provision of transport infrastructure:

Restructuring and Technology:

1. Support for efforts to privatize the railways and ports

2. Support for restructuring in the roads sector
3. Support for multimodal operations
4. Support for IT applications to improve efficiency and reduce cost

Support for Public Private Partnerships

5. Support for corridor working groups to foster tangible results based on tapping the interests of stakeholders
6. Support for data base development
7. Support for strengthening the ability of transport associations to do advocacy and advisory work
8. Support for training and sharing of lessons learned within the region

Institutional Strengthening for Harmonization and Enforcement

9. Support for development of regulatory institutions
10. Support for overload control and other regulatory enforcement
11. Support for improving monitoring efforts for implementation of the Transportation Protocol and of the Project
12. Enhanced coordination between RCSA-RAPID-SADC in the context of SADC's reorganization

II. CHARACTERISTICS OF TRADE AND TRANSPORTATION IN SOUTHERN AFRICA

Southern Africa is rich in natural resources and, up to this time, trade has emphasized exploitation of these resources and agriculture along with the development of transportation corridors to the coast for export to other parts of the world. The mercantile trade policy of colonial administrations built transportation systems to export natural resources and to import manufactured goods. There is still relatively little intra-regional trade, possibly due to inefficiency and high transport costs (rail and road tariffs in southern Africa are 3 – 5 cents per ton kilometer, while U.S. rates are 1-3 cents per ton kilometer). In the period since independence, this pattern of trade has largely persisted. In response to Angola's internal conflict, Rhodesia's Unilateral Declaration of Independence (UDI) and increasing opposition to South Africa's apartheid policy, alternative rail and road import/export routes were built. Now that routes are again functioning to and from South Africa, the result is an extensive transport system that is expensive to maintain and largely underutilized at present volumes of trade.

Implementation of a free trade agreement among the SADC countries will increase intra-regional trade, however, the main trade is likely to remain import and export traffic in the near and medium terms. As a result, the main transport framework will continue to be transport corridors to the coastal ports. The exception is a study carried out by the Development Bank of Southern Africa that proposes the need for a continental backbone connecting the Great Lakes of East Africa to the industrial hub of the Gauteng in South Africa. It is not intended as a corridor to the seaport of Durban, but instead a linking of the interior of the continent to encourage more intra-regional trade and development. This backbone would connect to corridors directly to the coast for export, using such traditional ports as Mombasa, Dar es Salaam, Beira and Maputo as well as the South African ports. Once South Africa became a politically acceptable neighbor, manufacturing goods began to flow from South Africa to the other SADC countries. This proposed route would strengthen this growing intra-regional trade and also use transport capacity to lead economic development in the interior – to change the economic imperative of the continent.

The new Executive Secretary of SADC, Dr. Prega Ramsamy, has set a target of achieving a 7% aggregate annual GDP growth rate in seven or eight years. This is ambitious when compared to the 2000 figures in which Zimbabwe is –6.1, Lesotho, Swaziland and Malawi are 2.5, Zambia 2.8, Botswana 6.0 and the rest of the SADC countries for which figures were available in the 3 – 5 range.

Table 1. SADC Real GDP Annual Growth Rate (%)

Country	1999	2000	2001	2002
Angola	2.7			
Botswana	7.7	6.0	3.8	5.0
D. R. Congo	-5.0			
Lesotho	2.8	2.5	2.8	3.0
Malawi	4.7	2.5	3.8	4.2
Mauritius	3.4			
Mozambique	7.3	3.8	7.5	7.0
Namibia	4.3	3.9	4.5	6.0
South Africa	1.9	3.1	3.2	3.5
Swaziland	3.1	2.5	3.0	3.5
Tanzania	4.7	4.9	5.2	5.4
Zambia	2.4	2.8	5.6	5.0
Zimbabwe	-0.4	-6.1	-5.6	1.3

Source: Economist Intelligence Unit

The costs of trade are transport and other costs of doing business internationally. As trade barriers are reduced, the impact of transport costs is an increasingly important determinant of participation in the global economy. Infrastructure is a major factor in transportation costs. Based on studies carried out by the

World Bank, "Infrastructure, Geographical Disadvantage and Transportation Costs", being landlocked raises transport costs 58% above the median coastal country. Improving infrastructure to among the top 25 percentile of landlocked countries brings the disadvantage down to 46%, and improving infrastructure in both the landlocked and the transit countries brings the disadvantage down to 39%. Therefore, improving the quality of the infrastructure can substantially improve the trade competitiveness of landlocked countries. The study also estimated the elasticity of trade flows with respect to transportation costs as –2.5. This means that halving transportation costs increases the volume of trade by a factor of five, or improving infrastructure from the 75th percentile to the 50th percentile increases the volume of trade by 50%. [1] These figures demonstrate the strong impact of transportation costs on the achievement of increased trade, a significant component of GDP and goal of SADC.

Trade preference agreements offer significant opportunities to penetrate new markets or increase presence in existing markets. They are also a stimulus to new types of production that will spur economic growth. A good example is the African Growth and Opportunity Act (AGOA) that is already having an impact on trade volumes and leading to plans for added agricultural production to feed new processing facilities.

Table 2. Apparel Exports to US from SADC Countries with Approved Visa Systems (in Millions Square Meter Equivilents)

	Date of Eligibility	January-May 2000	January-May 2001	% Growth
Lesotho	23-Apr	13.558	17.916	32.1
Mauritius	18-Jan	16.008	17.134	7
South Africa	15-Mar	16.797	23.433	39.5
Swaziland	30-Jul	2.944	3.958	34.4
Malawi	8-Aug	0.458	1.549	238.4
Botswana	28-Aug	1.097	0.539	-50.9
Total		50.862	64.529	

Source: RAPID Consultants for AGOA Program, Gaborone, Botswana, 2001

Many of these products, however, are not only price sensitive but also very sensitive to time and reliability of delivery. Garments are a major opportunity under AGOA. The current garment industry in the U.S. is characterized by frequent changes in demand according to season and fashion. Retailers contain their costs by maintaining small inventories and being able to get "just in time" delivery of orders. Distributors seek reliable supply sources so that they can maintain relatively small inventories while meeting the time critical needs of retailers. This means that to take advantage of AGOA, African garment manufacturers will need to establish reliable transport systems for sourcing raw materials within Africa and for transporting finished garments to the U.S. market. Competitiveness will be dependent not only on the quality of production, but also on the speed, reliability and cost of the full transportation network required.

Southern Africa produces hides and leather. The lucrative leather footwear and accessories market is another potential area for business growth under AGOA. The same criteria for success will apply to this market. Reliable and reasonably-priced transportation infrastructure is essential to long-term growth and market integration in the SADC region.

TRANSPORT TRENDS AND BEST PRACTICES

Southern Africa is well endowed with ports that have traditionally made it a connecting point between Europe and Asia, South America and Australia. The maritime industry is reconfiguring rapidly, with the dominance of fewer players, larger ships, containers, great circle routes and global hubs. As in all forms of transportation, regularity and frequency of service have become almost as critical as cost. To achieve economies of scale, greater security and efficient handling, goods are increasingly containerized. Ships become larger and larger to carry a maximum load as they circumnavigate the globe. Only a few ports are deep enough to service these mega-ships. Mariners plot the globe with compasses into great circle routes

and calculate the time of deviation from these routes to determine the comparative advantage of ports. Based on these calculations, the major shipping companies are establishing fewer and fewer hubs between which the mega-ships move. Other ports become feeder ports for consolidation of loads and transport to the transshipment hubs. These shifts in global shipping affect the competitiveness of various African ports and impose limitations on business planning.

SADC REGION
Transport Infrastructure

As an example, Maersk Sealand has developed a transshipment hub at Salalah, Oman. Most traffic from Asia to Africa or Europe is directed there. Most North American trade continues to the transshipment hub for Europe in Algiceras, Spain. The ships that go to Africa are largely carrying goods to and from Africa. They make stops at Durban, some in Port Elizabeth, Cape Town and some in Walvis Bay. Because of the congestion in Durban, it has been eliminated as a stop for some inbound ships from Asia, but is included in the outbound route to Asia. Delay time in port and speed of shore crane operations are expense factors and criteria for choosing ports to serve. The East African ports of Mombasa, Dar es Salaam and Port Louis are feeder ports to Salalah and the Mozambique ports are feeder ports for Durban. As African ports think commercially about gaining additional ship stops, they need to take into account their natural geographic endowments in location and depth and the logic of the new maritime industry.[2]

Secondly, shipping companies are working to provide more door to door, multimodal service to their customers. They are acquiring landside capacity, sometimes forming alliances with trucking companies, sometimes forming logistics companies, sometimes creating inland container depots (ICDs). Manufacturing has become more global as well. With manufacturers sourcing their supplies worldwide and selling worldwide, they need absolute assurance on the reliability and timeliness of delivery. Shipping companies are changing the way they do business in order to meet this demand. Those parts of the world that can deliver this kind of transportation service will be most competitive in the global marketplace. This is the challenge to the transport providers in the SADC countries, to SADC's leadership and to SADC member governments reforming their transportation systems and management. Transport systems must be sufficiently flexible in capacity and management to adjust quickly to the needs of the private sector. Those who fully understand what is happening will be the winners in this competition.

As stated previously, the railway system was extended to create alternative routes through Tanzania and Mozambique to replace the ones through Zimbabwe and South Africa. As a result, the southern African rail system was expanded beyond the total demand within the region. At the same time, conflict in Angola, Mozambique and the Democratic Republic of Congo (Zaire), along with the economic and political instability in Zimbabwe, have reduced traffic in the region. Reduction in traffic, increased fuel costs, overstaffing and a public sector management mentality have led to inefficiencies and an increasing need for subsidies. Large backlogs of railroad infrastructure maintenance result in service interruptions and shortages of rolling stock. As a result, service is poor and rail is losing market share to the road sector. The railroads claim that road transport has unfair competitive advantages in so far as overloading is not controlled, rail in some countries pays fuel taxes and road users are not paying sufficient user fees to fully fund road maintenance and rehabilitation costs. Road transporters, however, are generally providing a faster and more reliable service and have achieved higher capacity utilization than rail. To achieve this, they use flexible pricing for back haul and achieve higher load factors for the round trips. High capacity trucks have been introduced in South Africa, while railways are too cash short to introduce new technologies.

The railways are still the most efficient way to move bulky, heavy loads and greater use of the railways would reduce the frequency and cost of road maintenance. The conclusion was reached several years ago, that the only way to improve management and productivity in the railroads is through concessioning of the systems. A private rail operator will be forced to make the tough decisions about closing unprofitable lines, adding new technologies and reducing staff to increase productivity. As a result, USAID and other donors have given considerable support for preparing the railways to be attractive candidates for concessioning, in preparing model concessioning legislation, in making the legislative changes necessary for concessioning, in preparing bid documents, in evaluating bids and in setting up regulatory agencies and assigning responsibility for managing the concessions. The countries of the region are in varying stages of the concession process.

Table 3. Status of Railway Concessioning

Railway/Port	Railway Status	Concessioning Status	Likely Completion
BBR	BOT Rehabilitation	Operational	Completed
Malawi Railway	Concessioned	Operational	Completed
CFM-North	Concession for rail and port negotiated	Finalize payment	End 2001
CFM-Central	Port Concessioned Railway concession	Operational Postponed	
CFM-South	Port Concessioned Railway concession	Final Documentation stage Terms being finalized with Spoornet	End 2001
Zambian Railway	Railway Concession	Bidding process begun World Bank assistance with preparation and retrenchment.	Mid 2002
Tanzanian Railways	Railway Concession	Preparation of bid documents commenced in July 2001. Bids likely to be invited in early 2002	Mid 2003
National Railway of Zimbabwe	Railway Concession	Earlier bid stopped. Ready to get legislative approval to proceed. Potential World Bank assistance to retrenchment.	
TAZARA	Railway Concession	Apparently an agreement between the governments of Zambia, Tanzania & China for concessioning, but no steps to define concession or prepare bids yet.	
TransNamib Rail	State owned, public private board and management	No commitment to concessioning yet. Board and senior management just terminated for lack of performance.	
Swaziland Railway	Ready to proceed on concessioning	Request to USAID for assistance in concessioning	

The Zambian Railway concessioning is at the stage of railway operators preparing their bids and, in Tanzania, bidding documents are in preparation. Swaziland has requested assistance for concessioning. On the other hand, some attempts at concessioning have stalled.

Concessioning of rail and port facilities linking Malawi to Nacala Port has stalled and is at risk of failure. It appears that the Malawi Government and private sector are very committed and have driven the concession process. The Mozambique partners, who are to be the majority shareholders, with CFM the principal one, are less so. This may be because for Mozambique this corridor is not a high priority in terms of economic impact and strategic importance. Furthermore the leadership of CFM, which one credible respondent characterized as still clinging to a command economy mentality, is not pro-active, as concerns privatization of any part of the rail system. According to the private partners CFM is delaying the process. According to CFM, the partners are delayed in bank approvals for the entry price and investment commitment. All indicated an end of 2001 date for the finalization. It may be possible to use commitment of donor funding to leverage a solution. The EC has rehabilitation of 77 km of the Nacala line under active consideration. In the meantime, costs are mounting and profitability is impossible to achieve without more cargo and comprehensive corridor management vested in the new company. Productivity in the port is low. Maersk has withdrawn its own East African feeder service, because time to load/unload was too unpredictable to maintain vessel schedules. Additionally, exports (largely containerized tobacco) exceed imports, requiring shipping of empty containers to Malawi, which cost must be borne by export cargo. This reduces competitiveness of Nacala as compared to other ports. There is no satisfactory road alternative to this corridor, so the only other option is to shift Malawi traffic to another corridor.

In Zimbabwe, the biggest stumbling block has been the difficulty in reaching a consensus with labor unions concerning the future of NRZ staff under privatization. The long period taken between the policy decision to privatize and implementation has had serious negative consequences. A valuable section of the network has been allotted to a concessionaire on terms which many characterize as non-competitive, the remaining railroad infrastructure has been allowed to deteriorate, quality of customer service and traffic has declined because of poor macro-economic conditions and considerable import/export traffic has been lost to road haulage. The railroad is heavily in debt, employee morale is low and it cannot continue to accept national currency in payment for services given its rapidly sinking value and the need for foreign exchange. (The most recent Southern African Railway Association Newsletter contains an article by NRZ Chief Planning Manager that confirms and amplifies on these deficiencies.) Despite these conditions, legislative approvals for concessioning are expected soon and an improved economic situation, based on the recently negotiated settlement of the land impasse, will make the concession more attractive to an investor.

The process of building support for concessioning and implementing it is complex and often more time consuming than anticipated. The process is nevertheless proceeding and USAID and the other donors should stay the course because the objective is the right one. The alternative is losing the railroads. Once closed, assets disappear and railroads once lost are prohibitively expensive to rebuild.

Downsizing of staff is a major political issue. The World Bank provides support for separation payments and outplacement services. They do not cover payments to those who become employees of the concessionaire. There is need for a creative, politically acceptable solution for these employees. It is also essential that concessioning be awarded in a fair and transparent manner and that issues related to competition and regulation are dealt with adequately. There is a role for USAID in providing assistance that insures the success of concessions and the acceptance of the process by the people affected.

USAID committed $US 12 million to the development of a Rolling Stock Information System (RSIS) to improve railway productivity and customer service through tracking rolling stock in the network. RSIS will enable better utilization and centralized tracking of accounts for use of rolling stock. The hardware has been purchased and installed and the software well advanced. The project, however, exceeded the time and budget allocated. The project has been stopped while a new contractor is identified. It is critical that the project proceed so that productivity can be enhanced and further erosion of market share is forestalled. Many of the railway officials expressed their interest in the project and its speedy implementation. The Republic of South Africa is proceeding to install RSIS on their own and should have it running by early 2002.

The trunk roads in most SADC countries are good. Because of the amount of heavy freight being hauled on them, timely maintenance is critical to the sustainability of this asset. As a result, the road sector is also going through restructuring. Responsibility for road construction and maintenance has been transferred to independent road agencies in several of the SADC countries and others are in process of making the change. Various road user and cross border fees have been established to generate the revenue for road maintenance, and in some cases also construction, so that this work becomes sustainable rather than a budget line item. Road Funds have been created in many of the member states to administer these funds. Generally, these independent entities have Boards of Directors from both the public and private sectors that administer them. In some cases, the administrative and funding function are in the same agency and in others they are separated with a system of checks and balances to insure their transparency and performance. In some cases, the road user fees are transferred directly to the Road Fund, in others they pass through several Ministries first and the amount received by the Road Fund is somewhat less than that collected. None of the funds have become completely self-supporting at this time. Some receive a regular subsidy from the Government, others like the Namibian Road Fund are independent. The Namibian Fund, for example, was forced to borrow commercially to make up the shortfall this year when they didn't receive the fuel levy rate increase they requested. In interviews, most trucking associations indicated that they were willing to pay the road user fees as long as they knew the money went into a dedicated fund for road maintenance.

The major purpose of this restructuring is to insure funds for road maintenance through equitable charges to the users. It is also part of the process of creating a level playing field between rail and road. The World

Bank is providing support to the restructuring in many of the SADC member countries through the Road Management Initiative (RMI). RMI, in association with the U.S. Federal Highway Institute, is also providing training to local construction companies to insure their competitiveness vis-à-vis international contractors. These are important initiatives to encourage strong road infrastructure and a reliable road transport sector. USAID should coordinate with World Bank to be sure that the technical assistance and support needed to make this restructuring effective are pursued and that countries not included in RMI receive the necessary technical assistance to achieve similar objectives. Several strategies for USAID's role follow in Section V.

Many of the greatest time losses occur at borders. Each country requires different customs forms and procedures at their borders. For containers with consolidated cargoes, this can be especially difficult. A container for 12 customers may be delayed because of questions on only one shipment. Delays can be one day to over a week at a busy border crossing like Chirundu, which is on the border between Zimbabwe and Zambia. According to the shippers interviewed, the biggest problem is uncertainty. Even the occasional informal payments required are less of a problem. These payments are somewhat predictable, but the inability to commit to a delivery time is a major problem. The Executive Director of the Zambian Chamber of Commerce and Industry cited a case where retailers were advertising sales for the weekend based on timely delivery of goods from South Africa and frequently had to cancel the sale because the goods were stopped at Chirundu. A single form could readily be developed with multiple copies (including Portuguese and French versions) so that the trucker simply tore off one sheet at each border. Currently, truckers are required to carry cash to cover customs and other cross border charges. This puts them at risk of theft when either a smart card or voucher could be issued. Another issue is border post hours. They need to be extended on the major routes. Truckers are required to indicate their crossing point on the forms they submit when leaving the port. This means if they are delayed in route they cannot adjust their route to use a border post that is opened later. Another reason for delay is the on-going inconsistency of axle load limits. Improvements in transport times will mean little if days are lost at each border crossing. Therefore, it is important that the SADC customs and transport efforts are coordinated.

To significantly improve economic value-added production, a SADC country usually seeks opportunities in manufacturing and high value agricultural products such as tea, tobacco, and horticulture. Because these products are relatively high value and often components of offshore manufacturing units or perishable, shippers sometimes place a higher priority on speed, safety, and reliability of transport than on the financial cost of transport. For such product movements, the "total logistics" concept helps satisfy these criteria, even if this goal is achieved at extra cost. Corridor logistics management systems are a means of ensuring that the risks of delay, damage and theft will be reduced and liability for poor performance is clearly identified. This is a priority for landlocked countries, whose imports/exports must travel long distances and across one or more national borders.

For the above reason, considerable attention is being given to the logistical chain. This implies that the most efficient modes of transport be used and that efficient intermodal facilities be developed where needed. Shipping lines encourage containerization because it reduces the cost of loading and unloading of ships. They have encouraged standardization of reusable containers so that intermodal transfers are easier. Rail and road platforms are made to the same specifications with fittings to fasten the containers down. Cranes are also designed to readily move containers from one mode to another. Efficient transport in the region dictates that the places for intermodal connections are identified and redesigned to reduce time and cost. Containerization of general cargo is becoming inescapable to reduce cost, save time and improve security. This should be taken into account as transportation systems are reviewed for targets of opportunity for assistance. It also greatly enhances cross border times in that customs can seal containers at the port. As long as the seal is intact, the documents are generally accepted as establishing the correct value at each border without re-inspecting the container.

International multimodal transport is defined by the United Nations as "carriage of goods by at least two different modes of transport on the basis of a multimodal transport contract from a place in one country in which the goods are taken in charge by a 'Multimodal Transport Operator' to a place designated for delivery in a different country. It offers a seamless chain in transportation of goods from origin to destination and a single window service to the customer." A Multimodal Transport Operator (MTO)

integrates the transport services over several modes door-to-door and takes legal responsibility, unlike the clearing and freight forwarder who only acts as an agent. Multimodal transport offers several advantages:

- Reduced pilferage and theft losses
- Reduced damages due to weather hazards or handling
- Reduced insurance costs
- Enhanced loadability under direct supervision of shippers
- Isolation from dirty/explosive/dangerous cargo and freedom from fire and chemical hazards
- Overall improvement in quality of service including minimization of time loss in switching from one mode of transport to another
- One stop service for shippers for the entire transport chain

With transport cost, reliability of service, speed of delivery and security being major factors of competitiveness, multimodal systems should be developed for specific commodities and moves. USAID technical assistance in developing multimodal routes and strengthening the capacity of MTOs as integrators has a high probability of tangible results. MTOs identify transport constraints in order to establish a marketing edge. In so doing, they find solutions to issues that can be adapted more systemically to reduce transport costs and delays throughout the SADC transportation system.

The increasing integration of rail systems to provide a common service, such as on the Maputo Corridor or Spoornet's East Africa Corridor Train which integrates two gauges of rail and lake traffic into a dedicated container train from Cape Town to Kampala every second week is a positive step that should be encouraged. The more different transport entities work together on routes, the more they will also move to harmonize standards and carry out other aspects of Transport Protocol implementation. Development of a transport and marketing database will provide the data necessary to make effective operational and management decisions. The regional associations and corridor planning groups encourage stakeholders to see their divergent perspectives and to work together to find solutions. The very process of working together creates understanding and professional bonds that will make the process of negotiating the Free Trade Agreement easier.

III. USAID TECHNICAL ASSISTANCE UNDER STEP AND RAPID

Transport in southern Africa has been plagued by high costs, time delays and extensive documentation. This has been accentuated by the fact that there are landlocked states whose goods must transit one or more states to reach the coast and that conflicts, instability and political differences have necessitated new and sometimes less efficient routes being established. Between 1981 and 1993, international donors invested $US 7 billion into the transportation systems of the SADC region, including $US 415 million from USAID. Despite this level of assistance, transportation inefficiencies persist which make African products less competitive in international markets. The overall lack of results led to a new approach by USAID.

The Southern Africa Transport Efficiency Project (STEP) was designed to respond to the need for policy reform in the transport sector. The Project has two parts: Policy Analysis and Assistance to the Southern Africa Transport and Communications Commission (PAAS) and the Rolling Stock Information System (RSIS). PAAS consisted of four years of long-term assistance from August 1995 to September 1999, preceded by one year of technical assistance on the SADC Transportation Protocol. The RSIS project has not been completed. The original contract has been terminated and a new contract will be awarded. Considerable investment has been made in RSIS, and its completion is essential to the overall health of the railways in the region. RSIS will be discussed further in Section V. The current USAID initiative, Regional Activity to Promote Integration through Dialogue and Policy Implementation (RAPID) is a direct successor to STEP-PAAS and represents a long-term commitment to achieving the results of improved transportation efficiency through policy implementation and developing procedures for public policy and enforcement that involve the full participation of all stakeholders.

Achievements under STEP-PAAS

Booz Allen and Hamilton evaluated the STEP-PAAS Project in Fall 1999. Their findings are summarized below.[3]

STEP-PAAS had five specific goals initially:

1. Formulation of a surface transportation policy agenda for the SADC region
2. Detailed analysis, design and promotion of specific surface transport policies, such as pricing and investment policies, road taxation policies, transportation regulations and labor redundancy and retrenchment policies
3. Establishment of a regional transportation database
4. Enhanced regional capacity of SATCC-TU to undertake regional policy research, policy formulation and information dissemination through staff skill development, training and the application of computer-based transport policy models
5. Establishment of a regional institutional framework and mechanism for enhanced regional policy coordination and transport systems integration.

Goal 1. Surface Transport Policy Agenda: This goal was clearly accomplished with the signing (1996) and ratification (1998)[4] of the Transport Protocol. The consultative process that was used insured substantial buy-in from all participating countries and sectors. The interviews conducted for this study confirmed the conclusion of the STEP project evaluation that the national governments and transport associations consider it a binding legal document requiring national action.

Goal 2. Specific Policy Design and Promotion: Within the framework of the Transport Protocol, specific policies were analyzed, designed and promoted to varying degrees. At the conclusion of the STEP-PAAS project, 25 policies had been adopted by SATCC at the regional level, but only a few had been adopted and implemented at the national level. Certain issues such as border posts were not addressed, despite their critical importance to transportation efficiency. The need to think regionally is broadly recognized. At the specific policy level, however, there are some remaining concerns related to the different stages of development and the difference in needs of a land locked country and a coastal country. Much of the implementation effort was planned for the next intervention: RAPID.

Goal 3. Regional Transport Data Base: This goal was not achieved. The European Community was also designing a regional transport database, so the decision was made not to pursue this goal. Instead an electronic communication network was created for the transportation policy network coordinated by SATCC-TU. This network supported the institutional goals of the project. Unfortunately, the EC project was not successful, perhaps because of lack of agreement on goals among stakeholders and an overly ambitious design. In any event, the need remains for a regional transport database, including data collection and modeling capacity.

Goal 4. Capacity-building for SATCC: Simultaneously with the implementation of the STEP-PAAS project, the role of SATCC-TU was changed from operational assistance and investment promotion to policy reform. Therefore STEP-PAAS was designed to assist SATCC-TU specialists to develop the capacity needed for these new responsibilities. The project evaluator felt that this goal had largely been achieved. The sector specialists had been trained on policy issues and SATCC was recognized as the leader for transport policy reform in the region. The final evaluator noted the following weaknesses in SATCC as it prepared to implement the Transport Protocol:

- lack of a legal and regulatory expert to assist national governments in adapting the model legislation to their needs,
- little data collection and modeling capacity,
- incomplete transformation of technical experts to policy experts, and
- insufficient funding from SADC to perform the new functions.

Goal 5. Regional Institutional Framework for Policy Reform: A framework for working with member governments at the technical, senior official and Minister level was established and operating. National coordinators and sub-sector coordinators were selected and were involved in the policy implementation network. Sub-sector committees were formed in the road sector and were in process for the rail sector. Private sector group consultation had been incorporated into the policy-making process, including the Southern African Railway Association, Federation of Southern African Road Transport Associations, and the Federation of Clearing and Freight Forwarding Agents.

By the conclusion of the project, STEP-PAAS had helped to prepare the institutional capacity and plan for implementing transport policy reform. The issues that needed to be addressed during implementation were:

- Technical assistance to national legal and regulatory teams to analyze existing laws and regulations in each member country and make them consistent with the model legislation or draft new laws consistent with regional policies.

- Assistance in mobilizing public support for new laws and policies.

- Effective, sustainable national and regional transport associations.

- Credible and timely data to support policy-making.

- A system for effectively monitoring implementation and compliance.

At the conclusion of the STEP-PAAS project, it was seen that the re-engineering of SATCC-TU would entail further clarification of its role, resources and personnel training needs. As will be discussed later, SADC is currently in the process of moving the sectoral commissions to the headquarters in Gaborone. The process will necessitate SADC redefining SATCC's work, personnel and resources. Because of RCSA's extensive involvement in the transport reform process and on-going tasks, RCSA will have a positive role to play in advising SADC on the redefinition of role, the transition process and more effective integration of RCSA activities with SADC.

The RAPID Project

The STEP Project was designed to be responsive to changing local needs within southern Africa and to achieve indicative results rather than specific policies. This design provided the flexibility needed to insure results in keeping with the changing priorities and circumstances of the region. In planning the next activity, RCSA used the IQC format to insure the flexibility and speed to respond to specific opportunities to advance the implementation of the Transport Protocol and regional integration. The IQC was sole sourced so that a single contractor would manage it, provide continuity to activities, and be proactive in proposing new activities that would enhance the achievement of results. In the transport area, RAPID activities have been concentrated in four priority areas (targets of opportunity):

1. Reviewed the status of railway concessioning initiatives in the region and the technical assistance needed to advance the process and insure successful operating concessions. Based on these studies, RAPID has offered proposals for technical assistance to several countries and has received several requests for assistance with the concessioning process.

Reports and papers issued on the railways initiative under 2.1 in the period November 2000 and

September 2001:

1. Mozambique Railways Assessment
2. Zambia Railways Assessment
3. Zimbabwe Railways Assessment
4. Namibia Railways Assessment
5. Botswana Railways Assessment
6. A Profile of SARA, Its Regional Perspective and Proposed Activities
7. Proceedings of the Railway SCOM Workshop and TOR for SCOM
8. Model Legislative Provisions
9. Model Freight Contract
10. Model Passenger Contract
11. Inception Report Malawi Railway Regulator
12. Final Report on Railway Regulation in Malawi
13. Active Initiatives on Railways of SADC
14. Paper on Reasons for the Slow Progress of Rail Privatization and Benchmarking of Performance of SADC Railways.
15. Report on Oscar Costing Model--Application on SADC railways
16. Paper on the Feasibility of Rail-based Multimodal Containerized Service Kitwe-Durban

2. Provided assistance to SATCC-TU for the National Coordinators Planning Conference, Subsector Committee Meetings and other activities designed to strengthen the operating network for implementation of the Transport Protocol.

3. Provided assistance to SATCC-TU with an Information Technology Audit and general assistance with their internet and IT systems.

4. Carried out studies of border post barriers to effective transportation systems, made recommendations for improvements and drafted potential legislation and regulations to accomplish the needed changes.

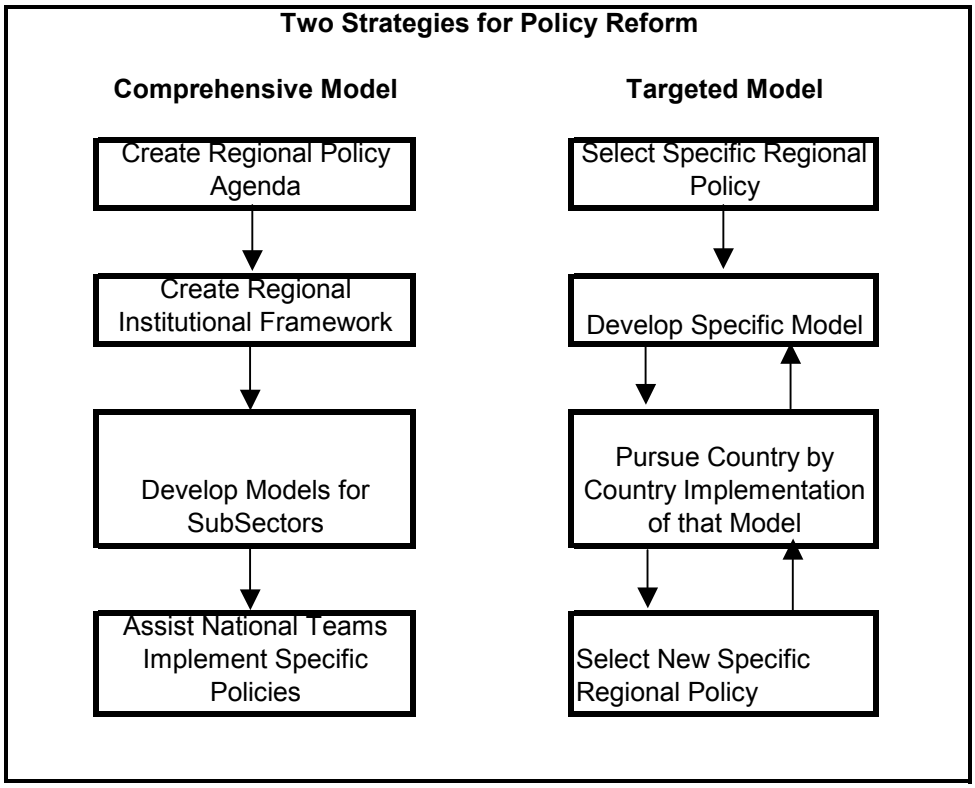
   Reports prepared include:
   1. Border Post Inception Report
   2. Border Post Legal Reform Requirement: Five Country Assessment
   3. Border Post Operational Status: Three Country Assessment
   4. Legislative/Regulatory Requirements for Joint Customs Controls in Namibia, Botswana and South Africa

5. Developed a pilot approach to working with the transportation corridor planning groups to improve transport cost and efficiency through simplifying cross border procedures, increasing border post hours, harmonizing regulations along the corridor and improving integration of transport systems. In addition to the series of border post and customs studies, public-private partnerships were strengthened and technical assistance given for developing MOUs for transportation facilitation. This activity is currently concentrating on the Trans Kalahari Corridor Management Committee and the Walvis Bay Corridor Group. It will be readily replicable along other corridors, most likely the Trans Caprivi Corridor and the Northern Corridor.

   Reports prepared include:
   1. Transport Corridors: Consolidation and Review of Regional Reports
   2. MOU for Trans Kalahari Corridor Management Committee (includes border post hours, border post structures and costs, driver training and testing, corridor fast-track freight system)
   3. Strategy Document for Walvis Bay Corridor Group

IV. STRATEGIC APPROACH

The Booz Allen and Hamilton Evaluation of STEP discussed two models for project design: comprehensive and targeted. The STEP program operated by a comprehensive approach The RAPID program has largely adopted the targeted approach. The two approaches are illustrated below:



Source: Booz, Allen and Hamilton, Evaluation of the SADC Transport Efficiency Project, Policy Analysis and Assistance to SATCC (STEP-PASS) for USAID's Regional Center for Southern Africa. December 4, 1999, p. 16.

The distinction is helpful in assessing the current status of the project and the strategy that USAID should adopt at this point. The comprehensive or regional approach taken by USAID was highly effective for the STEP stage. A regional framework and policies have been developed and the SADC states have a feeling of ownership over the process and specific policies. An institutional framework has been created for implementation across the region, although not fully functioning, and SATCC-TU has been positioned for a coordinating role. For these tasks, the comprehensive approach was the most effective. Its disadvantages are that it is more time-consuming and expensive, spreads resources over a wide variety of initiatives, and can stall at implementation.

Implementation of regional policies, by their nature, is carried out at the national level. At this stage, the targeted approach is more focused and can respond to national and corridor priorities. It also allows stakeholders with a willingness to proceed to gather momentum and lead the effort. The Transport Protocol is a comprehensive, complex document. Some aspects can be acted upon easily to demonstrate results. Others will take far more constituency-building and political/intra-agency dialogue to obtain legislative approval and carry out "on the ground" implementation. By having the flexibility to work on "achievable" objectives while advancing the overall agenda, results can be realized and used to promote other changes within the country or adaptation of the same reform elsewhere within the region. The IQC contract type lends itself well to this approach.

The challenge is "to keep the eyes on the prize". The goal is to have uniform, simplified regulations and procedures throughout the region, so that, for example, a trucker can leave the port and transit three countries without having to make adjustments in his load, present different forms and payments at each border, or stay overnight at a border that was closed when changing his routing would have allowed him to proceed. As reforms are instituted at the national level, it is necessary to have a monitoring system in place to know which reforms have been completed, which are in process and which have been stalled. The sub-sector committees are meeting to advance the legislation and regulation required for harmonized standards, restructuring and concessioning, but the reporting mechanism is not working well, despite the electronic capability to do this.

Monitoring and Evaluation The monitoring system is important in several ways. It allows SATCC and SADC to track the regional agenda, i.e. to evaluate whether the national reforms will, in fact, lead to a harmonized system and to plan what activities need to be undertaken to advance the overall objectives of regional integration. By knowing who has completed particular policies, it is possible to capture the lessons learned and to develop best practices for the region to be shared with other countries. On difficult issues, countries that are able to proceed can pilot approaches. The impacts of these pilots can be assessed and the information disseminated to countries that have not yet acted on the particular policy or standards. Peer pressure also works very effectively, when national leaders see that their government is acting more slowly than the other SADC members. There are significant differences in size, private sector strength, government institutions and so forth that will affect implementation. Effective monitoring will identify any trends in whether specific groups of countries are slow to implement. Lack of implementation may indicate a problem that needs to be addressed within the integration framework. For all of these reasons, an effective reporting and monitoring system needs to be addressed in RCSA's transportation strategy.

In numerous interviews, the complaint was made that SATCC-TU held many meetings that were irregularly attended and issues were not addressed between meetings. It is very important that the new systems that emerge from the reorganization, encourage a process that progresses toward targets in a systematic way using meetings effectively and having sufficient clarity of follow-up tasks to move activities along effectively before the next meeting. It is also very important that the monitoring process is an effective part of work on all specific SADC market integration initiatives.

When technical assistance is given to transport associations or government agencies, further funds should be tied to achievement of indicators, where feasible. In this way, the recipient takes ownership and responsibility for achieving results. This practice will insure greater likelihood of sustainability at the conclusion of the project. It is equally important that RAPID monitor activities for performance of indicators. RAPID is such a large and diffuse program that it is very important that staff members/consultants know the overall program and where their activity fits within the whole. While this is an IQC that should be able to respond quickly to perceived opportunities, it is also necessary that staff members know what other groups are doing to achieve the optimal synergy between the different RAPID activities. Working on a timetable with performance objectives and indicators in a useful tool for achieving tangible results. Since much of institution building is coaching, the indicators should not be defined so narrowly as to preclude coaching and other non-quantifiable activities from having their appropriate place in the mix of activities.

Recommendation Therefore, a combined approach is recommended that incorporates the targeted approach to specific opportunities while using the comprehensive objectives and institutions established under STEP-PAAS. It is important to integrate the two approaches to achieve USAID's strategy for transportation. For example:

Targeted approach: Support should be provided for transportation corridor planning groups because they elicit the active participation of the public and private sectors around a set of concrete goals that address the specific interests of the participating groups and therefore become increasingly self-sustainable as they achieve results. The public sector gains an appreciation of the positive and negative effects of policy on transport delivery systems and economic growth. The private sector provides energy to drive the process and gains the policy results it needs for market success. The approach can be replicated along the main

corridors in the region to stimulate reform in the transportation network and to market underutilized transport infrastructure and services.

Comprehensive approach: At the same time, RCSA should provide support to the continued efforts at the national level to reform the agencies responsible for the road and rail sectors, to harmonize regulations and to create a level playing field that will generate the greatest efficiency in the regional system. Active communication between this effort and the corridor groups is necessary to insure that their work results in a harmonized system.

Coordination It is also important that the RAPID organization has a key transportation specialist coordinating the specific transportation tasks, monitoring the achievement of indicators and encouraging the sharing of information, lessons learned from pilots, and best practices as they evolve from the implementation of specific tasks. This is even more important as the transportation portfolio involves more modes of transportation (rail, road, port and multimodal). In this way, RAPID can be most proactive in advancing USAID's strategy. There is strong leadership for the corridor approach and there needs to be similar leadership to insure that the comprehensive objectives are advanced in a parallel way throughout the region as countries demonstrate willingness to proceed.

Data Collection, Analysis and IT Systems

Effective transportation and national economic planning requires good data and statistics. This need was recognized in STEP-PAAS, and it remains unsatisfied. Some of the information exists, but diffused through many sources. To work effectively, it needs to be organized and compiled into a single database with relevant links to sources of more specialized information. There is an equal need for commodity flow information and global market demand. In designing the database it is important that all potential users are identified and that they are encouraged to think broadly about all potential uses and types of interactivity that would be required. Since presumably the EC went through this exercise, their survey and design should be reviewed to avoid the problems they had. The database should be developed in such a way that the core part can be running within a year and the design can be expanded later to include the other types of functionality envisioned for it. It is critical for all IT programs that they are developed for expandability. It is assumed that there will need to be seed money for the initial design of the database, but that it will be sustained through user charges. Putting it on a commercial basis creates the incentive for the managers to market it to a wide group of users and to continue to add functionality to it. For both this and all other IT applications, the telecommunication infrastructure to carry high speed voice and data communications must be increased and made more reliable.

The Private Sector as the Driving Force

Significant development of private sector associations and their involvement in the policy-making process has already been accomplished and institutionalized. Several methods for increasing their impact on the process are recommended in the strategy section. Many of the reforms involve moving responsibility for transportation to public private partnerships and private companies. Several recommendations follow for tapping into programs that other donors and the bilateral missions have for strengthening the private sector capacity. Much of the sustainability of the restructuring rests with the empowering of the private sector to bring about change and helping governments understand that their function will be enhanced through a partnership with the private sector. Successful advocacy depends on the skill and resources to make cogent economic and financial arguments for or against policy implementation.

Transparency, Accountability and Fair Competition

The private sector is also one of the strongest forces for insisting on transparency and accountability. In interviews with trucking companies, they have all indicated that they are willing to pay road user charges if they go into a dedicated fund and the administrative procedures are kept simple, both for the trucking company and for the government agency. In this way, the money collected goes primarily to road maintenance, not primarily to administrative services. The more the private sector associations, which represent a group of companies concerned with fairness for all their members, are included in an advisory

capacity to government, the better the controls will be on unfair influence or facilitation payments. Where the private sector and government have administered weighbridges jointly, for example, they have provided an effective check on the performance of each other. As transport operators become more aware of the impact of policy on their operations and more able to carryout advocacy activities on their behalf, they will be able to bring about fairer competition. For example, the Swaziland Railway has been very effective in arguing for not paying fuel levies and for raising the penalty for overloading. In Namibia, both of these are part of the existing system. Namibia, as described in the strategies, has one of the most complete systems of checks and balances built into their Road Agency and Road Fund program.

Competitiveness

It is important that competitiveness be built into the transportation systems. For example, the railway concession in Zambia allows the concessionaire monopoly use of the lines, in order to make the necessary investments and operational improvements to get the railroad on a sound financial footing. After five years, the concessionaire must allow other railroads to use the track based on an established fee structure. Therefore in the long term, the railway will need to operate a competitive service able to compete with any of the other regional railroads. Likewise, licensing of vehicles and other regulations should not be so high as to severely limit participation in the haulage market.

The project should also encourage private sector participation and competition. In the road restructuring in Namibia, the government construction operation was made private. It has some protection, however, in the bidding process for three years. After three years, the construction company must compete against other Namibian and regional firms. To insure continued competitiveness in an open regional market, some business training should be given. In the same way, smaller trucking firms should have some business training, loan assistance and perhaps government set-aside contracts for small business. This short-term program would enable them to compete more effectively in the long-term and reduce some of the disparity in competitiveness in the region.

IMPACT OF POLITICAL INSTABILITY AND CONFLICT

Both Angola and the Democratic Republic of the Congo have faced protracted conflict since independence. They need infrastructure rehabilitation to become full participating members of the SADC community. A few of the bilateral donors are working on such issues as rural roads, but it is hard for donors to have a lasting impact on the infrastructure until the underlying issues causing conflict are resolved. There may be some areas where RCSA can assist in road development that will lead a specific area into peaceful trade and relations with the neighboring country. Anything that will foster economic development region by region will help to stabilize these countries. Otherwise, the best strategy for now, is to continue to plan regional integration that includes these two countries and be ready to begin very quickly when the opportunity to intercede arises. Both countries are very rich in natural resources and will have the means to develop rapidly if the political situation can be resolved.

Zimbabwe is a special case, because it lies in the center of the SADC region, is rich in agricultural and mineral resources, and is traversed by many of the rail lines and roads that link the landlocked countries with the coastal countries, especially South Africa. As described previously, the economy is in very bad condition due to national policies, the conflict over land and high oil prices. If the agreement reached at the Commonwealth meetings in Nigeria in September 2001 holds, then the situation may improve depending still on Robert Mugabe's actions. The interviewee from the national railway confirmed that rail privatization is proceeding again. Both of these developments could have a sizeable impact on the Zimbabwean economy. The RAPID rail specialists conducted a series of interviews from Zambia to Port Elizabeth/Durban to explore interest in using Botswana Railway as an alternative to Zimbabwe, all companies consulted agreed that was possible, however, they would prefer to continue to use the Zimbabwe route which is well established and does not require an intermodal connection. Many of the donors have pulled out of Zimbabwe because of loan payment arrears, but this may be a good time to present a unified donor package that encourages resolution of the outstanding issues, so that Zimbabwe can

contribute to regional integration. RCSA should provide input where possible with SARA and encouragement of the privatization and integration of the regional railway system.

Donor Involvement in Transportation

There are many donors involved in both provision of infrastructure and restructuring of the institutions that manage transportation. A number of them have already been described. It is important that there is more effective coordination of donor effort to gain maximum utility from the money spent.

The World Bank plays a major role in both planning and construction of transportation infrastructure and restructuring. In restructuring, they have funded the concessioning preparation and implementation in a number of modes and countries, have provided funds for retrenchment and outplacement services for railway privatizations, and are very active through the Road Management Initiative (RMI) program in restructuring and achieving sustainability in the road sector. User pay systems, sustainability and poverty reduction are overriding goals of World Bank projects worldwide.

Up to this point, the World Bank has worked primarily through missions in individual countries. The World Bank has determined that it would like to play a regional role as well working from the South African office. An internal strategy paper has been prepared and is being vetted within the Bank now. Mrs. Kritzinger, Senior Economist in the World Bank in Pretoria, South Africa said that they would be very interested in meeting with RCSA to coordinate efforts on the regional level.

The European Commission is also very active in construction of transportation facilities and restructuring. The EC adopted the Cotounou Convention on June 23, 2000 and is now in process of defining their bilateral and regional activities in the SADC states. The EC Economic Development Funds (EDF) are funded in five year cycles. In the past, the EC had a specific fund for SADC and projects carried over if they were not implemented in the cycle in which they were approved. For example, the rehabilitation of 77 km on the Nacala rail line and road projects in Angola have been held over from previous cycles. The EC is now reevaluating all of these projects in the pipeline to determine which to drop. In future, a two-year review will be held and projects that aren't moving forward will be dropped. Because of the overlapping of SADC with COMESA and the Indian Ocean Community, the EC is seeking to define a regional (rather than a SADC) approach to the division of funds. The EC's new foci will be (1) regional economic, trade and investment integration, and (2) transportation, water, and electricity infrastructure and services. They do not foresee any activity on telecommunications, which they perceive as more a private sector activity. They plan to move from a project approach to a program approach. With the continued political insecurity in Angola they have now decided to drop their old projects so as to free the money for other projects elsewhere. The rehabilitation work on the Nacala rail line is still in active consideration, pending the finalization of the concession. Commitment of this funding might be used as leverage to get the concession finalized. A Nacala Corridor donors conference is planned in Nacala for October or November. They are also reviewing potential road projects, including upgrading sections of the Trans Kalahari and a north-south road to Southern Angola. Still undecided is funding of the bridge at Kazungula. They have dropped the dredging of the Port of Beira from consideration. The EC is about to advertise for a transportation advisor to work with member states on protocol implementation. The SADC representative expects to have her recommendations completed by mid-October and then it will go through the wider vetting process at SATCC, the member states and Brussels. The EC representative to SADC indicated an interest in talking with RCSA and RAPID to understand better their current programs and strategy for the coming years. She expressed the need for greater information and coordination of donors. Because the EC is also involved in a planning cycle and is planning to provide assistance in Transportation Protocol implementation, this would be an important time for such coordination to take place.

The African Development Bank is involved in a number of road projects and has the rehabilitation of the Beira Corridor in its pipeline. A list of AfDB projects is in the annexes.

Bilateral donors are very active in the SADC countries, both in construction and technical assistance. For example, Japan and Germany are involved in the Trans Caprivi Corridor and Zambesi bridges. The German Government is active through GTZ and KfW throughout the region. They have road projects in

the Democratic Republic of the Congo, Namibia, Tanzania and Lesotho. Norad of Norway is active in Malawi in agricultural development, Mozambique in rural road rehabilitation and management, Tanzania in rural roads and the establishment of the national road administration and road fund, and Zambia in rural roads. They were previously active in the road sector in Zimbabwe, but have now frozen their funds until the economic situation improves. The Swedish International Development Agency is active in more than half of the countries in SADC. SIDA was involved in the restructuring of the road sector in Namibia.

The USAID bilateral missions are involved in a number of relevant programs. USAID Pretoria is involved with Transnet in the restructuring program, especially in the port sector. The restructuring involves separating the ports and concessioning the operation of each port. They will still remain a part of the Transnet umbrella. The mission did not see a specific need for collaboration on these efforts, but there should be an ongoing transfer of information so that synergies can be gained from the RCSA and USAID Pretoria programs. Pretoria also from time to time brings regulatory specialists from the Federal Trade Commission or the U.S. Department of Justice to advise on regulatory needs and practices. There may be synergies with this activity as well as some of their enterprise development activities. USAID in Maputo has become less active in transportation since the STEP program ended. If opportunities emerge for fostering the privatization program in Mozambique, coordination should take place with this Mission since they have a long- term view of transportation issues in Mozambique. USAID Lusaka has an active Small Business Development Program, a Zambian Agribusiness Technology Assistance Center, Basic Education and an HIV/AIDS program (75% of the AID funding). The Small Business program is developing a pilot program for tourism development in the Livingston area which involves evaluating all the opportunities for low income individuals to supply the major hotels, restaurants, tour companies, etc. and then providing them with basic business training and counseling. It is an approach that might be very useful in the development being promoted along the Trans-Kalahari for Community-based Development Programs as suggested by the C2C Study carried out by TMT. USAID has also worked with the Zambian Chamber of Commerce and Industry and other association to increase their ability to do public advocacy and will be an on-going resource for public advocacy work. USAID Windhoek is just bidding a contract for a Private Enterprise Development Project. They are interested in the C2C market study as there may be opportunities for them to foster business development along the Namibian portion of the Trans-Kalahari and Trans-Caprivi. Other activities of USAID Windhoek are education, natural resource management, democracy and governance and HIV/AIDS.

The With and Without Scenario

USAID has already made significant contributions of support and technical assistance to the development of the transport sector in the SADC region. The presence of RCSA has meant infusions of technical expertise, organizational skills, and monitoring and evaluation methodologies to the on-going efforts of the institutional structure established under SADC and to national governments. RCSA was on the ground level of legal, regulatory and institutional change, and in the fostering of a strong public, private partnership to create the environment and to implement the restructuring necessary to efficient, cost-effective transport systems. The 18 month period from the conclusion of STEP until the RAPID program began operating demonstrates the "without" scenario. Considerable momentum was lost as well as the trained specialists at SATCC. The goal is a self-sustaining effort, but to achieve this the institutional capacity building must be finished and the benefits of transportation restructuring demonstrated. There is a very critical role for RCSA in the effort to make the changes in the transport infrastructure operational and lasting. A process was begun that needs to be completed by the member countries and their private sectors, but with a technical/institutional infusion from the outside. The synergy in pairing domestic and international expertise is empowering and leverages additional international resources. The latter is what RCSA and RAPID are well equipped to provide.

In some countries like Swaziland, capable people are in places and the policy framework and action plan have been approved. They are at the point of needing technical expertise to adapt the model legislative and prepare the regulations to implement privatization of the Swaziland Railway and establishment of a National Road Agency and National Road Fund. Much of the ground work for this process is in place and they are looking for assistance from people who have carried out this process elsewhere in this region and in other regions, who can help them carryout the process in such a way that they cost effectively achieve

their objectives of a capable private operation of the railway and sustainability of their road maintenance program. Without this assistance, the process may delay further or actions may not achieve their objectives.

In Zambia, a road fund has been created, but there are major problems in getting dedicated revenue transferred directly to it. Responsibility for roads is presently divided among seven government departments and needs to be consolidated into one agency. The World Bank through RMI is playing an important role in this process, however, there may be a role for RCSA in coordinating what is happening in Zambia with the activities in the rest of SADC to insure harmonization of programs through the region. The Government of Zambia has begun consulting informally with the private sector regarding policies and bilateral transport agreements. The private sector organizations have begun watching for government policies that may be detrimental to their operations so that they can seek to influence the policies and regulations before they are enacted. There needs to be technical assistance to institutionalize the private sector role and to provide resources to the private sector to effectively present their concerns and to offer alternative solutions. In the case of railway privatization, the World Bank is playing a significant role in funding retrenchment and assistance in preparation for bidding, evaluation of bids, negotiation of the concession and implementation. There are, however, several key areas for which the Zambian Privatization Agency has requested assistance from RCSA. Because of the sensitivity of retrenchment issues, this assistance may be key to the public perception of the privatization and support for additional privatization. There are other areas related to the creation of strong regulatory and concession supervision functions that RCSA can play as well. Many of these interventions are not costly, but can make a significant difference in insuring a smooth, successful transition from public to private management.

In other countries, the process is not this far along and assistance needs to start with the enabling framework and action plan. Six or seven countries did not receive this assistance under STEP and they need to be jump-started into the process of restructuring their transportation systems. Without assistance, they may fall behind other member states further, which weakens regional integration for all.

Restructuring is a continuum. Monitoring of progress has been incomplete to this point. Progress needs to be plotted and technical assistance provided as needed to keep the restructuring process moving forward and to insure that the systems being developed will lead to greater and greater integration of the regional transport system, simplification of government requirements and enhanced efficiency on the part of the private sector. On-going assistance needs to be targeted to performance benchmarks agreed to by the recipient to encourage the high level of commitment needed to achieve sustainability.

V. PROPOSED STRATEGIES

A series of proposed strategies follow. They can be categorized as technical infusions to increase the efficiency of the transport system and effectiveness of restructuring/concessioning, support for public private partnerships and institutional capacity building initiatives.
Restructuring and Technology:

1. Support for efforts to privatize the railways and ports
2. Support for restructuring in the roads sector
3. Support for multimodal operations
4. Support for IT applications to improve efficiency and reduce cost

Public Private Partnerships:

5. Support for corridor working groups to foster tangible results based on tapping the interests of stakeholders
6. Support for database development
7. Support for strengthening the ability of transport associations to do advocacy and advisory work
8. Support for training and sharing of lessons learned within the region

Institutional Strengthening:

9. Support development of regulatory institutions
10. Support for overload control and other enforcement
11. Support for improving monitoring and evaluation efforts for implementation of the Transportation Protocol and RAPID Project
12. Enhanced coordination between RCSA-RAPID-SADC in the context of SADC reorganization

A matrix follows linking the proposed strategies to Intermediate Results to be achieved and indicators to evaluate the success of specific activities in achieving the Intermediate Results. The interviews conducted for this study confirm the basic strategies and intermediate results established for the current 5-year cycle, but suggest that they should be expanded as illustrated in italics in the following matrix.

Strategy 1: Support for Efforts to Concession Railways and Ports (IR 1,2,3)

Goal: Foster successful rail concessioning that provides effective freight operations for natural rail commodities. Create a level playing field for competition between rail and road transport.

Current Status and Rationale: Based on SADC goals, RAPID has analyzed the status of railway privatization in five countries and made recommendations for potential RAPID interventions. The Bulawayo Beitbridge Railway used a concession model to rehabilitate a critical transit line through Zimbabwe that is now an effective commercial operation according to the Southern African Railway Association. Zambia and Tanzania have begun the concessioning process. Railway concessioning has revived again after being stalled in Zimbabwe. Malawi has also been concessioned, but is facing difficulty because the Nacala concession has not been finalized. The Mozambique concessions are all experiencing delays because concessioning has been left in the hands of the railway itself. Lack of performance by the railway in Namibia has caused the Board of Directors and senior management to be replaced, however, no structural change is expected at this time. Concessioning is perceived as an operational and political risk in some countries. Success stories are needed and senior decision-makers convinced.

Zambian Intervention Parameters: The Zambian Privatization Agency (ZPA) is currently in the bidding process for Zambian Railways. Approximately 26 people representing 13 companies attended the bidders conference on August 28-29, 2001. The World Bank has provided assistance in the bid preparation that is likely to be extended to the bid evaluation, negotiation and concession implementation. Zambia has requested RAPID assistance on three issues:

1. A retrenchment fund for railway employees who will be hired by the concessionaire and therefore are ineligible for the World Bank-funded retrenchment program. The Zambian Government cannot pay all approximately 1,000 employees at the time of concessioning and needs a plan that is financially viable and will persuade the railway employees that their payments are secure. ZPA has been in negotiation with the union and has been unable to find an acceptable solution up to this point.
2. A plan for dealing with residual assets of the railway after concessioning.
3. A plan for continued passenger service on the Mulobezi line, which is operated by Zambian Railways, but not owned by them. ZPA would like to explore a tourist steam engine excursion or other plan to maintain the railway. Alternatively, the track could be removed and the right of way converted to a road. There is no road currently.

Potential Results and Constraints: It is critical how the general public perceives railway concessioning. Much of the public perception of privatization is lost jobs -- for example, the current labor demonstrations in South Africa. Officials of other SADC countries will watch closely what happens in Zambia to determine the future of their concessioning program. This request represents an immediate opportunity to follow-up on an offer of assistance and to demonstrate that workers can be protected in retrenchment proceedings. It is a case of a small further investment, producing a positive result that can be used to encourage a major benefit, i.e. concessioning in Mozambique and Zimbabwe as well as restructuring in Namibia. Recommendations developed for Zambia will be replicable in the other countries. The constraint is that the project work should be completed as soon as possible, but prior to January 31, 2001. RAPID has invested time and effort in a review of concessioning in the region. This task represents an opportunity to get an immediate visible result that will smooth the concession implementation in Zambia and make it easier to complete the concessioning elsewhere.

Swaziland Intervention Parameters: Under a previous USAID project, financial and managerial restructuring of Swaziland Railroad was successfully carried out. The final evaluation recommended further restructuring follow-up. Swaziland has been updating the Railway Act in accordance with the SADC Transportation Protocol, reducing staff and starting to pay corporate income tax this year. SR management has reviewed the model legislation and contracts for rail concessioning produced under STEP/RAPID and found them useful. Swaziland Railway has requested assistance under the RAPID program for restructuring and full concessioning of the railway. Because of the small size of the

railway, they envision it as a unitary concession with foreign investment, employee participation and Spoornet as a strategic partner since they lease much of their equipment from Spoornet.

Potential Results and Constraints: The railroad has been lobbying with success for policies that will create a more level playing field between road and rail in Swaziland, such as exempting the railroad from the fuel tax, raising the penalty for truck overloading, and adopting a user pay system for road construction and maintenance. Swaziland has established cargo and the potential for additional cargo based on planned production increases and new incentives for mining development. Concessioning will enable SR to lease additional special purpose cars to capture the additional traffic. For these reasons, the likelihood of a small, but successful concession is relatively high. RCSA assistance would demonstrate the value of concessioning to other railways and have some replicability to other countries. As with the Malawi railway and the Nacala line, completion of the concession of the Ressano Garcia line in Mozambique is important to the attractiveness of a Swaziland Railway concession.

SARA Requested Interventions: SARA is involved in several initiatives to strengthen the regional railways. The Joint Corridor Planning and Management Process is an effort to coordinate service along the main rail corridors so that there are minimal delays at the borders. The preliminary questionnaire and site visits have been carried out and a plan for the next steps prepared. SARA representatives carried out a site visit to the United States arranged by the Association of American Railroads in May 2001. Based on that visit, SARA proposes

- technical cooperation on the Joint Corridor Planning effort,
- improvement of lobbying skills and materials,
- in preparation for the installation of RSIS, more in-depth study in the U.S. of the operation of similar systems.
- Assistance in the procurement, installation and training on the use of the OSCAR Railway Costing Model that was demonstrated in Dar es Salaam July 10-11, 2001, as part of RAPID.

Port Concessioning: The same approach should be applied to port concessioning where appropriate.

Strategy 2: Support for Restructuring in the Road Sector (IR 1,2,3)

Goal: Assist the road sector restructuring program in making road maintenance sustainable through implementation of road agencies and road funds. Encourage transparency and accountability in the use of road funds. Foster the harmonization and enforcement of road standards and regulation. Enhance private sector participation in the road sector.

Current Status and Rationale: The SADC countries are in different stages of restructuring. (1) Some of the countries are participating in the World Bank's Road Management Initiative. RMI provides institutional restructuring support, financial assistance in institutionalizing road funds and technical training. The project has generated a whole series of technical papers on such topics as road user charges, organizational structures for road agencies, lessons learned in managing road funds, and so forth. In collaboration with the U.S. Federal Highway Administration Institute, they also conduct business training for road construction and maintenance companies. (2) Government construction crews are being converted to private sector companies. The staff have good engineering skills, but need business training. (3) Considerable concern was expressed in interviews with the trucking companies, that in a deregulated environment, they would not be able to compete with the larger companies, particularly those based on South Africa.

Intervention Parameters: .(1) Some of the SADC countries are not currently participants in RMI. In the interest of achieving full implementation of the Transport Protocol, RCSA should work with World Bank to insure that all the countries receive this kind of support, either from World Bank or from USAID and the U.S. Federal Highway Administration Institute so that all the countries are able to effectively restructure the road sector. Some of the technical papers and documents generated by RMI will be useful to SADC in the implementation of the Transport Protocol program. (2) In Namibia, the road construction staff have been converted to a company that competes against private companies. They are protected for 3 years, then they will operate as a wholly private company. A training program in business management, proposal writing and project budgeting and management would be very beneficial for them and other newly formed construction companies which are not participants in RMI. (3) To compete, the Swazi Truckers Association would like to have business training and a mechanism put into place that they can purchase additional trucks. They are aware of the trucks that were donated from the US and Germany to the Malawi Truckers Association during the grain crisis in the 80s. The payments for the trucks were used to set up a revolving truck fund that continues to allow Malawians to purchase trucks at favorable interest rates. In Swaziland, truck costs, bank interests rates, and collatoral requirements are very high. The Swaziland Truckers Association acts as a kind of cooperative that receives job requests and seeks the member with the required configuration of trucks available for the job. Frequently, they have had to turn down requests because they have insufficient trucks or trucks are being repaired. USAID should consider setting up a revolving fund and business management training for some of the indigenous trucking operators to allow them to compete effectively in a liberalized market. For indigenous South African trucking companies, Citibank operates a special loan program targeted to their needs for truck purchases. South African companies should be made aware of this fund. Possibly RCSA could encourage its being spread northwards.

Potential Results and Constraints: Working with the World Bank will make more efficient use of donor resources, while insuring that the SADC countries are all making the institutional changes envisioned in the Protocol. This series of programs is designed to insure that the institutional changes are made in such a way that private businesses are strengthened and that smaller companies are able to survive in an unregulated environment. In the interest of keeping some balance in opportunity among the countries, USAID should ensure that they all have some assistance in these three areas.

Strategy 3: Support for Multi Modal Transport Operations (IR 1 & 2)

Goal: Stimulating economic development by lowering the cost of international trading through the creation of more efficient, reliable and secure freight transportation. Reducing institutional barriers to trade through containerization; encouraging the development of small and medium sized enterprises (such as the garment industry) through consolidation of less-than-container loads. Making rail more attractive to high quality bidders by improving profitability and enhancing the value of the transport operating entity.

Current Status and Rationale: Whilst trade uses more than one transport mode and may be considered as multi-modal, in fact multimodal transport (MMT) according to the legal definition has yet to develop in the region. Multimodal transport operators (MTOs) are required to carry the total legal responsibility of a consignment door to door, irrespective of mode, providing a one stop window for customers and minimizing their exposure transport operations. Central to multimodal transport is containerization which, for countries other than RSA, has not developed to international levels. Containerization reduces transport costs as it improves utilization by balancing movements in both directions; it reduces terminal time through more efficient handling and reduces transit time by minimizing delays at border crossings. Containerization facilitates trade, especially transit, by minimizing and simplifying customs procedures; it increases security as manifested by a reduction in insurance costs; carries with it documentation (through bill of lading) that will allow earlier payment to consignors; permits small outputs to be consolidated to one container load (LCL) thereby encouraging small businesses to access international markets. RAPID (task order 2.1) is currently engaged in developing MMT along the North South Corridor, Copperbelt to SA ports (Durban). A study has been completed with good results. Potential stakeholders have been identified, their support obtained and the next steps identified. RAPID shoud support the implementation phase of this service via a public private partnership (PPP) approach.

MMT Intervention Parameters: Support is needed for the next two years to ensure that MMT development is properly prepared and implemented for future replication in other corridors. These are also good candidates for a PPP approach. The following areas of support as needed:

1. Project preparation including a draft business plan for an inland clearance depot (ICD) and the MMT operation; concession documentation; workshop/s for promotion to stakeholders; overall coordination to insure that the project will achieve its goal and purpose.
2. Implementation support to Zambian Government for concessioning process of the ICD.
3. Post implementation advice to ensure realization of planned benefits and replication;

Potential results and constraints: The Copperbelt provides a special opportunity for the project to succeed due to a large and increasing market. Its success will be gauged by increased inland movement of containers by rail, increased rail revenue and sustained improvement of services for customers – particularly copper mines and development of LCL business. Central to the success of the project is the willingness of shipping lines as owners of containers to permit them to be moved to the Copperbelt. The results may be undermined by sustained illegal road transport operations practices. There should be no financial constraints since ICD investment will be sourced privately and funding for rail track improvements will be in the interest of the future Zambian Railways concessionaire.

Strategy 4: Support for Information Technology to improve efficiency and reduce costs. (IR1)

Goal: Use information technology to gain greater operational efficiency from the existing infrastructure.

Current Status and Rationale: Many of the main ways to increase efficiency and reduce cost are through the application of information technologies. Much of the documentation for customs, freight forwarding, border crossing, and cross border fees need to be simplified and consolidated. The ability to receive and forward transaction data electronically has revolutionized doing business. It is important that the SADC member states are able to take advantage of these new technologies to reduce the disadvantage of interior states and to increase the competitiveness of regional products in the global market. A seamless flow of information form markets in Europe, Asia and the Americas will have a substantial psychological and practical impact on geographical distance.

Intervention Parameters: The entire logistics and tracking system needs to be reviewed for automation opportunities. The implementation of computerized systems can be used as an incentive for simplifying and harmonizing forms, procedures and data collection throughout the region. There should be a regularized system for reviewing automation initiatives with COMESA for maximum compatibility and utilization. The use of the same harmonized code by SADC and COMESA will not only facilitate customs, but also a whole variety of data collection and analysis functions. A series of innovations are recommended below.

- RSIS needs to be completed quickly and implemented. Many people interviewed asked for the system to be implemented. Completion will mean that railways can know where their rolling stock is at any time. This will allow them to arrange backhaul from the port which will have a significant impact on price, cost and operational efficiency. It will also allow SARA, where RSIS will be housed, to provide electronic accounting of car use and invoicing of all the member railways.
- Railways need to have an electronic system, easily updated, to provide price quotes as part of a rail or multimodal port to destination estimate. Mr. Mahlalela, CEO of Swaziland Railway, and Mr. Chothia of Manica Freight, both indicated it can take a week or two to put together a price estimate for multinational freight service. This is because railways cost each commodity each time a request is received. At this speed, rail always loses to truckers.
- Railways have requested assistance in the implementation of the OSCAR system for costing railway operations. This system was demonstrated to interested railways in July 2001. The railways need assistance with procurement, installation and training.
- Ports need to receive and process bills of lading electronically. All port clearances and customs should be done electronically to cut time and cost. In this way, the cargo to be inspected can be predetermined and the rest can go through the port without delay. The ports of Mauritius and Namibia both expressed interest in further IT and MIS applications.
- It is imperative that customs is automated. Probably the greatest delay on the transport corridors is customs, especially for consolidated containers. Because customs generate a major portion of national revenue, it is difficult to get simplification unless assurances can be given that revenue will not be lost. The customs and transport officials should cooperate for the effective implementation of electronic data interchange (EDI) and to insure that it is implemented in such a way that it has the maximum positive impact on transport.
- The SADC countries not in COMESA's ACIS system should consider participation in it.

Potential Benefits and Constraints: The benefits is time saved throughout the logistics chain. Saving staff time and resources will have considerable impact on cost. It will also affect the actual time spent enroute and the reliability of the transport service. The constraint is the capacity, speed and reliability of the telecommunications network. It is important that the telecommunication initiatives be implemented in tandem with transport.

Strategy 5: Support Corridor Working Groups to Foster Tangible Results (IR 1,2,3)

Goal: Assist in the development and strengthening of public private partnerships to expedite effective utilization of transportation corridors. These groups will be used to assess all the factors on the corridors that are causing high costs, delays, poor reliability and insecurity and to develop, promote and implement solutions. The second part of the strategy is to market the corridor to utilize its full capacity.

Status and Rationale: This approach is being used with considerable success for the Walvis Bay Corridor Group and the Trans Kalahari Corridor Management Group. The Walvis Bay Corridor Group is composed of the Walvis Bay Port Users Association, Namibian Association of Freight Forwarders, Namibian Road Carriers Association, Namibian Chamber of Commerce and Industry, Federation of Namibian Tourism Associations, Namibian Port Authority, TransNamib Rail, Offshore Development Company, Department of Customs of the Ministry of Finance, Investment Center of the Ministry of Trade ad Industry, Ministry of Works, Transport and Communications, and the Walvis Bay Municipal Government. This group therefore combines all the private sector associations concerned with the success of the corridor to move freight in least time at least cost. It also includes the operators of the transport system and the Namibian Government agencies responsible for the policy that affects the corridor. In this way, it has brought together all the public and private sector interests to find ways to develop the corridor effectively and then to market it. The initiative captures the immediate interest of all members. It provides the private sector a regularized interaction with the Government officials who can bring about the kind of regulation and incentives the corridors need to develop. It sensitizes the Government officials to the impact of policy on the competitiveness of the corridor and economic growth and development in the region and country. It is a "win-win" proposition and has the whole-hearted support of all of its members. One of the corridors being promoted is the Trans-Kalahari that goes from Namibia across Botswana to the Gauteng region of South Africa. All interested parties in all three governments are now participating in the Trans Kalahari Corridor Management Group. This Group was formed to harmonized the regulations along the corridor in all three countries and to speed customs handling and other border documentation along the route. Again, the rationale is effectively organizing the private sector and government interests to speed the process of corridor development and competitiveness.

Corridor Intervention Parameters: It is recommended that USAID continue to fund technical assistance to these two groups in the form of advice on structuring their work and resources to use, conducting special studies on border posts, customs, control of overloading and other perceived bottlenecks on the route. Based on the analysis in Section II, this is exactly the kind of analysis and action that will gain maximum use of the corridor. The intervention also involves advising on working with the governmental processes for getting solutions in the most direct way. The next phase is developing the marketing intelligence to effectively promote the corridor within the region and with international shippers, freight forwarders, multimodel transport operators and manufacturers looking for a base in southern Africa.

Potential Results and Constraints: The best way to get results is to mobilize the people who will benefit from the action. This method will convince private associations of the efficacy of contributing their time to this kind of endeavor and demonstrate to government the economic value of PPPs in achieving results and of designing policy that empowers the private sector to "grow the economy". Like any working group, it can take time to get it working smoothly and to get the commitment of time from busy individuals that it takes to do this kind of work. However, once the methodology is show to bring tangible results and is well established, it will sustain itself. This model is highly replicable throughout the region. USAID should identify other corridors for which it should be used, such as the Northern Corridor or the TransCaprivi. Because the corridor concept is being used to generate harmonized standards as they relate to the corridor, it is important that this work is done in tandem with the effort to harmonize regional standards. In this way, each effort complements the other. If not coordinated, it can lead to further disparities in the region as a whole.

Strategy 6: Support for Database Development (IR 2 & 3)

Goal: Consolidate regional transport data and economic analysis into a single system that is easily accessible, avoids duplication of effort and improves maintenance and expansion of data. Develop a similar system for market intelligence.

Current Status and Rationale: *Transportation systems should be demand driven. The region needs a database that includes data on the transport delivery system, utilization and cost. The region also needs a though marketing study to identify the targets of opportunity in the global market, the constraints to penetrating those markets and the transportation networks and strategies to tap these markets. As indicated previously, STEP-PAAS was intended to develop a transport database, but it was not done since the EC was working on one. There are numerous government sources, transportation consulting firms, research institutes and others that keep statistics and carry out economic analyses. The data generated should all be assembled in one system with internet links to original sources. In this way, data is accessible and decisions are taken on the basis of more information. Data generated under the RAPID should all be included in this database.*

Intervention Parameters: A thorough survey is difficult for countries to undertake individually and can best be done at the regional level and made available to all member states.

Phase 1: The transport database should include such data as physical assets by mode, capacity, utilization, intermodal exchanges, cost of handling and transportation, road user and crossborder charges, seasonal reliability, transit and border times, a list of contacts including shippers, associations, corridor planning groups, etc., a research bibliography with abstracts or tables of contents, and legal and regulatory tables comparing countries.
Phase 2: A market study should be undertaken and the information included in a database. Tasks should include: Establish trade patterns based on origin-destination points, commodity and volume. Interview shippers to identify problems and business development strategies. Compare capacity with need and establish baseline infrastructure utilization rates and bottlenecks. Draw the hinterland map for each commodity to determine which ports are competitive using freight transport cost matrices for each commodity and origin-destination pair. Develop a series of internet links to international shippers, freight forwarders, MTOs, trading bloc web-sites, legal and regulatory regimes by commodity and other sites that will provide market information. Some of this data should be included on the database. Other data lends itself better to the development of an economic and market research consulting service available to the public and private sectors on a fee basis. This service could potentially cover the cost of maintaining the database and keep the basic subscription fee low.

Once the basic data is in place, and the software created, there must be a system for maintaining and updating. This can be done through charging a subscription or "user" fee for accessing the information. This could be set up on a prepay basis as has been so successful with cell phones in Africa. The site should also be prepared with a strong system of links so that national government decision-makers and companies can readily research specific market opportunities and transportation resources using a variety of available resources. The provider would need some donor funding to create the service, but once created should be maintained and expanded through "user" fees. It is envisioned as a consortium that includes research institutes, such as the Namibian Economic Policy Research Unit, and regional transport economic consulting firms. Studies, such as that currently being undertaken by CSIR in Pretoria on factors that impede transportation services in the region and comparative transport costs on the main transportation corridors, should be incorporated into the database.

Potential Results and Constraints: This consortia would be a source of baseline data for research on such issues as transportation capacity, cost and competitiveness along particular routes as well as on production in the region, demand for products in which Africa is competitive, distribution networks for products, and regulations that apply to imports. The database will strengthen the ability of private sectors to compete, of governments developing trade promotion programs and incentives, and for both to carry out studies for decision-making or advocacy. In the process, local research institutions would be strengthened and made more sustainable through integrating them into an information system that supports economic growth and

development and increases their revenue base from data gathering and consulting services. The constraint is whether it can be funded through user and consulting fees and whether fees will exclude the entities RCSA would most like to encourage using it.

Strategy 7: Support for Strengthening the Capacity of Transport Associations to do Advocacy and Advisory Work (IR 2 & 3)

Goal: Strengthen private sector involvement in formulation of transport policy and regulation through strengthening the national and regional associations representing the transport industry and formalizaing their role in the decision-making.

Current Status and Rationale: Under the Transportation Protocol, regional transport associations such as truckers, railways, port users, and freight forwarders were created. They are currently receiving USAID technical assistance in business planning and are working to strengthen their member national associations as well. Both regional and national groups are an effective voice for transport reforms. The regional associations attend the sub-sector committee meetings in an advisory capacity and participate fully in public private partnerships like the Corridor Planning Committees. In some places, their role is institutionalized as in Namibia, where the transport associations review and comment on all regulations that will affect them before they are passed by the legislature. In other places, their advisory role is still informal. In Zambia, the chief officer of the truckers association is regularly invited by government officials to comment on legislation, regulation and issues for bilateral negotiation. Once the value of this collaboration is established, it is easier to get the role institutionalized. Recently, Zambia passed legislation that would require truckers to post a bond with customs while they are transiting the country. The Zambian truckers association contacted the regional association, FESARTA, that in turn notified several other national truckers associations. Together they gathered data on the potential impact of the bond and wrote an effective argument against implementing the bond. They were effective in preventing the law from being implemented. Most associations, however, lack the time and skills to do this effectively.

Intervention Parameters: Because most of the associations have unpaid staff with limited resources and because of the dearth of data on transport issues and ability to prepare economic models to demonstrate impact, it is recommended that USAID support the development of an advocacy resource center capable of developing economic and financial arguments for new policies and advocacy materials for member states. It is suggested that a regional firm with experience in advocacy and a local transport economist be given an intermittent contract for a specific length of time (budget) annually. Each transport association would also be allocated a certain amount of time that they can use the advocacy center in the first year. The advocacy team would first do a workshop on effective advocacy and their services for the regional associations. With a limited budget, each association will need to weigh which activities are priorities and require fairly sophisticated economic arguments. It is critical that the system is set up to provide a rapid response to requests for service and that the service and results are evaluated twice a year.

Potential Results and Constraints: Centralizing this function will make it more cost effective and strengthen the tendency to develop arguments on a regional as well as national basis. Assistance should emphasize capacity building in the associations, use of the Project database and development of an electronic filing system for effective retrieval of economic policy arguments. Ideally, this will be done in conjunction with development of a transport/market database.

Strategy 8: Support for Training and Sharing of Lessons Learned within the Region (IR 2 & 3)

Goal: Support institutional capacity-building through exchange of personnel to learn best practices in the region and to develop internal training and capacity building programs within the Ministries and transport authorities and regulators. RCSA should work with bilateral AID programs to strengthen incentives for students to enter science, engineering. economics and finance fields.

Current Status and Rationale: (1) Implementation of the SADC protocol means that many countries are experimenting with the implementation of new agencies, funds, enforcement methods, management practices, etc. It is an ideal time to foster sharing of best practices within the region. This can be done through workshops, preparation of manuals, and programs in which several key staff members of a newly created road agency spend a week with their counterparts in a well established road agency to fully understand its structure, operations and management. Mr. Dauphin Makaka, CEO, of the Malawi Road Authority and of the Association of Southern African National Road Agencies (ASANRA), participated in such a program in Namibia and has requested that a staff person from Namibia travel to Malawi to assist them in implementing some aspects of the Namibian program. Both Mr Doolhur, Permanent Secretary in the Mauritian Ministry of Public Infrastructure and Chairman of the Road Development Authority Board, and Mr. S. Mudzinganyama, Chief of Policy, Planning and Coordination of the Zimbabwean Ministry of Transport and Communication, expressed interest in participating in such a program to assist them in implementing the new structures. (2) In many of the countries, the number of trained transportation economists and regulators is relatively thin. Therefore, there is a general need to provide training and study tour type experience to build the depth of expertise in the new transport authorities. Such programs also contribute to recruitment and retention of good employees. In Namibia, where scientific, engineering, finance and economics education for the indigenous people is relatively recent, there is a strong need to encourage students into these fields, to recruit them into the transportation field, and to provide in-house training and capacity building opportunities to retain them. The former can be integrated with national education projects and the latter involves technical assistance in setting up in-house training.

Intervention Parameters: (1) It is recommended that a fund be created in ASANRA in which each association can request one reciprocal exchange opportunity within the region during their first year of operation. The fund will be used to cover travel and per diem costs only. ASANRA should be gathering information on the structure and operation of each of the road authorities in the region and be helpful in pairing new authorities with more established ones. ASANRA is also the logical place to coordinate a best practices document for the region in consultation with technical specialists in the field. (2) It is recommended that a training specialist be recruited to work with those road transport authorities and road funds that feel the need to develop an in-house training capacity. TA provided to one authority would be applicable to others and could be disseminated to Authorities requesting it by the specialist or through ASANRA.

Potential Results and Constraints: Training and institutional strengthening is a major component of insuring tangible, regional results from the institutional reforms being made and their sustainability over time. The main constraint is the time devoted to the institutional exchange. It will be important to insure that no authority is overburdened.

Strategy 9: Support for the development of regulatory institutions.

Goal: Improve safety in transport infrastructure use and vehicle operations. Provide assistance to regulatory agencies and improve enforcement of regulations.

Current Status and Rationale: In the interviews with Ministries of Transport in countries like Mauritius and Malawi, the issue of regulation and safety was raised numerous times. With increasing concessioning of transport services, regulatory policy and enforcement is a major issue for governments.

Intervention Parameters: Some of the technical assistance requested is:

- Inventory of safety issues in each mode, regulatory models developed and deficiencies identified, as well as assessment of institutional and human resources currently available and required. Analysis of the applicability of potential regulatory models.

- Summary of best practices in the region and in other countries with similar resources.

- Pilot demonstration project using private/public partnership for enforcement of load controls and road worthiness inspections on one corridor or in a single location.

- Legal and training assistance in enforcement and management of regulatory agencies, particularly in ports and rail sub-sectors, where transition to new organizational structures accompanying commercialization/privatization are underway.

- Assistance in regulation and enforcement for handling of hazardous and inflammable cargoes as well as training of persons related thereto. Technical Assistance is also needed in emergency response procedures, capabilities, responsibilities, and liabilities.

Potential Results and Constraints: Safety is a regional issue and another area that requires harmonization. It also lends itself to a regional approach since development of procedures and manuals for one country can readily be adapted for use in another country. Consistency of application is important since so much passenger and cargo movement is multinational. The constraint is getting it recognized as a priority and funds appropriated. Its importance and the difficulty of getting funds allocated make safety an appropriate issue for grant financing.

Strategy 10: Support for overloading controls and other regulation enforcement (IR 2 & 3)

Goal: Reduce the damage to roads and bridges caused by overloaded vehicles and create a level the playing field between rail and road. Provide overall institutional, procedural and coordination assistance for the enforcement of harmonized regulatory standards throughout the region.

Current Status and Rationale: Much debate and planning has taken place in the SADC region on the subject of overloading control, but there are very few examples of success. Zimbabwe is the only country that reportedly implements fairly strict overloading control consistently, causing truckers with illegal loads to divert to routes in Botswana that lacks enforcement infrastrucuture. Only two provinces in South Africa and several toll roads have effective systems on certain major routes only, Tanzania is reasonably effective around Dar es Salaam and on the Dar-Zambia route. Elsewhere, enforcement is very lax due to bribery of control officers by transporters, poor coordination between police, licensing offices and agencies operating weighbridges, poor maintenance of equipment, the ability of operators to avoid control locations, and the dependence on fines that are too small to act as a deterrent and difficult to collect.

Intervention Parameters: A pilot project (1 year) in each country, involving a campaign for voluntary compliance, coupled with operating a weighbridge with private sector participation, would create the necessary benchmark systems and standards of performance to encourage more comprehensive enforcement applications in that country. Model systems operated by private firms, in partnership with public enforcement agencies, in South Africa may prove replicable. The weighbridges need not be located at border posts, since a location at a major traffic generating point may be more efficient. Administrative measures rather than fines should be included, such as revoking licenses of repeat offenders, temporary impounding of vehicles, and off-loading of loads where practical. Education, public exposure, and persuasion, directed at firms who are obtaining lower costs by shipping products repeatedly overloaded, should be part of the pilot program. An economic model that demonstrates the effect of continual overloading on vehicle maintenance and replacement should be developed for use in convincing truckers to change their loading practices. A combination of persuasion and enforcement will be most effective is reducing overloading on southern African roads.

Potential Results and Constraints: Enforcing the overloading regulations would create a much more uniform and competitive pricing structure for trucking and thereby remove the short-term cost advantage that illegal operators have over legal operators and railroads and reduce the long-term economic cost of rapidly deteriorating truck assets and more frequent road accidents. It would slow the deterioration of roads, which currently is hastened by overweight trucks, thus reducing road maintenance costs. Once successful with this initiative, a similar methodology could be used for other enforcement issues.

Strategy 11: Support for improving monitoring efforts for implementation of the Transportation Protocol and of the Project. (IR 1,2,3)

Goal: Provide a means of monitoring progress on Protocol implementation, to speed the process, identify and solve problems, locate inconsistencies that need to be rectified and plan future activities effectively. Insure that the Project is effectively addressing the objectives and that target indicators will be achieved. Identify modifications or additional areas that should be addressed by the Project.

Current Status and Rationale. The Transportation Protocol specified a reporting mechanism that SATCC-TU would implement. The process started by SATCC-TU was based on action plans developed in each country and the report was to indicate whether the Ministry was on schedule and what had been accomplished. Not all countries had the training workshop and developed an action plan. Nevertheless, they could have reported on what was accomplished, but did not. It is important that all countries go through an action planning process with target dates and responsible agencies and people identified. The monitoring process

- puts pressure on countries to demonstrate progress in achievement of Protocol implementation on the reporting forms,
- exerts peer pressure on countries that do not demonstrate progress toward agreed upon regional objectives,
- allows more targeted assistance at the regional level,
- identifies problems in implementation that should be addressed at a regional level,
- identifies political issues related to perceived economic disadvantage, etc., which need to be addressed substantively by SADC,
- identifies any inconsistencies in standards that need to be rectified,
- provides data for the on-going planning process within SADC, and
- allows for best practices in implementation to be identified and disseminated\.

Intervention Parameters: RCSA should offer to provide assistance in designing and implementing the monitoring process. Many lessons have been learned in the years since the Transportation Protocol was established. The monitoring form should be designed so as to gather the data that will allow the monitoring process to perform the above tasks. It should also be developed to provide baseline data for the starting period and then monitor results against that benchmark. The data collected should be made available on the SADC website so that member states can access it at any time to see where they are within the overall process and where they stand vis-à-vis the other member states. Formats should be developed for tables and other graphics tools that allow a quick status report on all the various components of the Protocol and the various standards being harmonized.

Potential Benefits and Constraints: An effective monitoring tool that is available to member states and all other stakeholders in regional integration is essential to the effectiveness of the implementation process. The internet system employed by SATCC-TU had major problems with viruses. It is important that any internet based systems are equipped with anti-virus software which is frequently used and updated. It is also critical that well trained computer specialists are hired to build, maintain and use the systems.

Strategy 12: Enhanced coordination between RCSA-RAPID-SADC in the context of SADC's reorganization. (IR 1,2,3)

Goal: Review the operation of the RCSA-RAPID-SADC relationship to-date and determine the most effective assistance that can be given to foster SADC's regional integration, particularly the role of transportation. Provide technical assistance in the regorganization of SADC and the effective utilization of information technology in achieving SADC's goals.

Current Status and Rationale. SADC is currently going through a restructuring at the headquarters and of the sectoral subcommittees and commissions that were dispersed around the region. It is an excellent opportunity to review the relationship between the three parties and the make the coordination more effective.

Intervention Parameters: RCSA should offer to provide assistance during the restructuring process. Many lessons have been learned in the years since the Transportation Protocol was established. Some of these lessons are:

1. It is very difficult for an organization to restructure itself and to make the hard choices about existing staff. Therefore, SADC should hire an outside consultant to make recommendations regarding responsibilities and staff organization.
2. It is imperative that the best people are chosen for key positions. Requirements should be fully thought out and people hired who have those technical skills. Dynamic leadership is also a very important requirement of any restructuring process. Leadership skills should be an important consideration.
3. Procedures should not be made too complex. At the same time, the process that builds consensus within countries and within the organization should not be lost.
4. Communication within the organization must be built into the system and must be developed in a SADC database that is also a decision-making tool. All stakeholders should be consulted in designing the system and the basic data should be widely accessible. Internal documents can be kept in a separate, non-public part of the system.
5. Careful thought must be devoted to the collaboration with the private sector. The regional associations, corridor groups and other organizations that have functioned well should be consulted thoroughly and their input used as the administrative and operations procedures are developed. They should have a role in the organization.
6. A new reporting structure should be implemented that is simple, using the internet technologies installed as possible, and that will be an effective planning and evaluation tool.

Potential Benefits and Constraints: Reorganization is inevitably a painful process. It is important that it is done thoughtfully and carefully. Only SADC members can make the final decisions, however, there is an important potential role for RCSA/RAPID to play in the process and the benefits from an organization designed for the successful implementation of the Protocols are significant. It is also useful that the reorganization is taking place as RCSA is planning its strategy for 2003 – 2008.

SO 2: A More Integrated Regional Market		
IR 2: More Efficient Provision of Infrastructure		
Intermediate Result	Activity	Indicators
IR 2.1 Physical infrastructure built, maintained *and operated efficiently and cost effectively*.	1. Support for railway privatization as the best means to get the necessary efficiency in the railways. a. Respond to Zambia's request for assistance on labor redundancy and	1. Zambian labor unions agree to proposed settlement for employees rehired by concessionaire. Model is prepared for replication in similar circumstances in region.

	residual assets. (FY02) b. Provide concessioning assistance to Swaziland railways. (FY02) c. Monitor situation in Zimbabwe, Tanzania and Mozambique for potential assistance to expedite the process. (FY02 & FY03-8) d. Economic study of the optimal use of road and rail for main commodities. (FY02)	2. Zambian concession proceeds in a satisfactory way that can be used to promote concessions elsewhere. 3. Impact data is developed for promoting railway concessioning. 4. Technical assistance successfully targeted to promote concessioning and increase the success of concessioning in at least 2 other SADC countries.
	2. Support for continued reform of the road sector: a. Assistance in the design and implementation of the independent road agencies and road funds. Dissemination of best practices through ASANDRA. (FY02) b. Assistance in developing data and software for assessing potential road revenue sources. Dissemination of information among road funds. (FY02) c. Convening road fund workshops to increase competencies and encourage compatible systems in the region. (FY02)	1. Double the number of independent road agencies and road funds as in 2000. 2. Successful coordination of programs with RMI. 3. Manuals about and analysis of road agency and road fund models in the region disseminated through ASANRA. 4. Software tool developed for evaluating revenue potential and impact of available sources of road fund revenue. 5. Workshop convened, objectives defined and schedule for the first year implemented.
	3. Support for increased multimodal operations. a. Project preparation including a draft business plan for an inland clearance depot (ICD) and the MMT operation; concession documentation; workshop/s for promotion to stakeholders; overall coordination of project to achieve goals. (FY02) b. Implementation support to Zambian Government for concessioning process of the ICD. (FY03-8) c. Post implementation advice to ensure realization of planned benefits and replication. (FY03-8)	1. ICD business plan developed. 2. Concessioning preparation and implementation carried out successfully. 3. ICD is successful according to business plan developed for it. 4. ICD concept is replicated elsewhere in the region.

	d. Support for MTOs as needed.(FY03-8)	
	4. Support for information technologies to im prove efficiency and reduce cost. Get baseline data now to evaluate improvements. a. Complete software and install RSIS in participating countries. (FY02) b. Software for providing price of service across multiple railroads. (FY02) c. Procure and install OSCAR in SARA railroads. (FY02) d. Port infrastructure for electronic documentation and customs. EDI connected to all cross border posts. (FY03-8) e. Implementation of ACIS in conjunction with COMESA (FY03-8) f. Research other technologies to enhance logistics. (FY03-8)	1. RSIS installed and operating in participating railroads. Greater wagon utilization. 2. Pricing software reduces time to generate price quote for a multinational cargo movement. 3. OSCAR installed in requesting railroads. 4. EDI installed on one port corridor and operational across several border. Total time for customs shortened. 5. ACIS introduced in 3 additional countries. 6. Workplan for additional IT applications ready to implement.
IR 2.2 Institutional capacity of public and private sector strengthened and made sustainable. *PPPs and consultation with private sector institutionalized in government decision-making process at national and regional levels.*	5. Support Transport Corridor Groups to capture commercial motivation to identify and rectify the factors affecting cost, delivery time, reliability of service and security of goods. (FY02 and FY03-FY08)	1. Group is successful in achieving concrete changes in such issues as border operating hours, harmonized standards on route, better intermodal logistics coordination on the corridor. 2. Volume of goods on the transportation corridor is increased. 3. Travel time on corridor is reduced and reliability of service improved.
	6. Support for transport and market database development. Strengthen the capacity of economic research organizations. (FY02 -Transport, FY03-4 - Market Study)	1. Database completed. 2. 50 paying users per month. 3. 100 paying users per month 4. Data base consortia raises sufficient revenue to offset maintenance cost. 5. Economic research institutes have increased research capacities.
	7. Support for strengthening the ability of transportation associations to do advocacy and consultative work. (FY03-8)	1. Advocacy consulting center provided assistance on 4

		campaigns a year. 2. Transport associations are successful in changing or building support for at least 4 laws or regulations each year.
	8. Support for training and sharing lessons learned. (FY 02 & FY03-8)	1. Exchange program established and 4 programs conduct each year. 2. Surveys of ASANRA members for road maintenance levels and impact on sustainability. 3. Successful design of other training programs. 4. Ideas being adapted from other countries in the region.
IR 2.3 Regional policies, regulatory frameworks and operational/technical standards harmonized and enforced. *Independence of regulatory agencies from operating and supervisory institutions established.*	9. Support for the development of regulatory institutions. (FY03-8)	1. Regulatory institutions created in 4 countries that have adopted railroad concessions. 2. Regulatory institution demonstrates power to enforce regulations.
	10. Support for overloading controls and other regulation enforcement. (FY02 –Pilot, FY03-8-Replication)	1. Pilot weigh bridges systems completed. 2. Successful replication of weighbridge system in at least 2 other countries each year. 3. Technical assistance provided on other regulatory matters.
	11. Support for improved monitoring of implementation of the Protocol and Project objectives. FY02-8)	1. Monitoring system in place. 2. Monitoring system being used as a planning and decision-making tool.
	12. Enhanced coordination between RCSA-RAPID-SADC in the context of SADC reorganization. (FY02-8)	1. New role determined through a collaborative effort with SADC. 2. Coordination reviewed each year and judged to be working well. Objectives set for coming year.